1. INTRODUCTION

This is the Maryland Health Care Commission's first report analysis of total annual health care expenditures as required by Maryland law; however, it follows the organization of previous reports issued by the Health Care Access and Cost Commission (HCACC). [1] A basic mission of the Maryland Health Care Commission (MHCC) is disseminating information that effectively portrays how the health care market in Maryland currently functions. An essential component in monitoring the performance of the health care system is the level and growth rate of health care spending. This report provides that information and describes the expenditure patterns that occurred in 1998 for the state's residents and how these patterns differ from 1997. The Commission recognizes that understanding the state's health care market also requires information on residents' health insurance coverage. Chapter 2 provides background information broken down to five geographic regions of the state and details characteristics of county residents, including their health status, the availability of health care resources, and utilization of services.

Much of this report was designed to address the information needs of various stakeholders in the health care system. Payers and **policymakers** can use the aggregate and per capita health care expenditure analyses to assess the results of policy decisions. Aggregate and per capita information allows **purchasers of health insurance** to compare their pattern of health care service use to the state and the region in which they operate. Provider/service group shares of total expenditures can be compared to determine the most influential in shaping how health care resources are utilized and which groups are increasing (or decreasing) in significance. **Provider groups** and **policymakers** can balance information on resource availability and treatment/health education practices with data on population characteristics to determine if supplies are adequate and if resources are being directed to the health conditions of greatest consequence for the state's residents.

KEY ISSUES INVESTIGATED

Statewide and regional health care needs, insurance coverage, resources, and expenditures are the focus of this report, including:

- **Health care needs:** How does the state rate in health-status measures for children? What are the most significant causes of death and how do Maryland's mortality rates compare with the U.S.?

- **Health care coverage:** What is the pattern of health care coverage in the state and how does it compare to the nation? How has enrollment in health maintenance organizations changed?

- **Resource availability:** Is the supply of different types of health care providers adequate throughout the state? How does the provider supply in Maryland compare to the U.S.?

- **Expenditures statewide:** What are the statewide health care expenditures? How have expenditures changed from 1997? What portion of expenditures is spent for physician services and hospital care? What services do remaining funds purchase?

- **Expenditures by payer:** What portions of expenditures do Medicare, Medicaid, HMO, and indemnity insurers pay? How have expenditures by each payer changed from 1997?

[1] Previous state health expenditure reports were issued by the Health Care Access and Cost Commission which merged with the Maryland Health Resources Planning Commission in October 1999 to form the MHCC. This is the second year in which the state health expenditure analysis has been issued in a report separate from other analyses.

- **Health care plans versus traditional coverage:** What are the differences in the level and distribution of expenditures between health care plans and traditional coverage, including indemnity insurance? How are these differences changing over time?

- **Out-of pocket expenditures:** How much do patients pay out of their own pockets due to co-payments and deductibles or because they lack insurance coverage for the service?

- **Health care needs, coverage, and resource availability for each region:** How do the state's regions compare in health-status measures for children and the most significant causes of death? What differences exist in the pattern of health care coverage within each region? How are physicians distributed across the state?

- **Expenditures by region:** Do expenditures vary substantially across regions? How does the proportion of expenditures by type of provider vary across regions?

IMPROVEMENTS OVER PREVIOUS HCACC REPORTS

Chapter 2 has been expanded and modified to include information on health status and health insurance coverage and the information on mortality rates has been reorganized to facilitate comparisons with U.S. rates. Additional statistics on health care coverage for specific segments of the state's population were added to Table 1. The special topics addressed in this chapter have been changed to provide new information. The section on children's health status has been supplemented with data on health insurance coverage of children. A special section was added that looks at the state's non-elderly adult population highlighting characteristics and behaviors associated with insurance coverage.

Information on health status, insurance coverage, and health expenditures for the state's five geographic regions has been consolidated in Chapter 4. The Behavioral Risk Factor Surveillance Survey[2] better reflects the different rates of coverage associated with age groups in each region and has been integrated into the model used to estimate the proportion of residents without health insurance in each geographic region. (While these changes result in improved uninsured estimates, the 1998 regional percentages cannot be compared to those in previous editions of the state health care expenditures report.)

The origin and methods used to generate the state and regional health care expenditure estimates in 1998 were refined. Included this year are two methodological changes that have a small effect on the health care expenditure estimates at the regional level. (See shaded box on page 3.) These adjustments have been applied retroactively to the 1997 data and are reflected in the 1997 expenditure tables and present a more precise measure of regional expenditure growth between 1997 and 1998. Two additional changes occurred because the source data used in previous years is no longer available to MHCC. These new and larger sources of data result in estimates that more accurately depict expenditures in the non-HMO private market, especially at the regional level. Another added advantage is that these non-proprietary data are made available annually at affordable prices. It is important to note that it was not possible to recreate the state expenditure analysis for 1997 using these new data sources. Therefore, the differences in the pattern and volume of Medicare and private, non-HMO insurance spending from 1997 to 1998 result from data source discrepancies rather than from changes in spending and utilization. The reassessment and adjustment of data from previous years is an evolutionary process that is an important part of the Commission's commitment to provide the best possible estimates of indicators that gauge the changing health care environment.

[2] Behavioral Risk Factor Surveillance Survey, 1996-1997. Survey Data, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. Maryland's BRFSS is administered by the Community and Public Health Administration, Department of Health and Mental Hygiene.

CHANGES IN METHODOLOGY AND SOURCES BETWEEN 1997 AND 1998

METHODOLOGY ISSUES	***1997***	***1998***
EXPENDITURES FOR PRISON POPULATIONS AND CHAMPUS ENROLLEES	Distributed among regions based on population distributions	Assigned to the region in which the prison/enrollee is located
DATA SOURCE ISSUES		
SOURCE FOR ASSESSING HOW HMOs DISTRIBUTE SPENDING AMONG SERVICE CATEGORIES	Administrative data submitted to Maryland Insurance Administration	Claims for a sample of HMO enrollees in Maryland
SOURCE OF MEDICARE SPENDING ESTIMATES	**HCFA's state-level estimates of Medicare beneficiary expenditures by provider category**	Projection based on residents' claims data
SOURCE FOR DETERMINING THE DISTRIBUTION OF SPENDING AMONG PROVIDER/SERVICE CATEGORIES BY NON-HMO PRIVATE PAYERS, STATEWIDE AND REGIONALLY	**Proprietary data base**	Two new data sources that provide information on more covered lives and broader range of benefit packages weighted to reflect the distribution of organized workers in the Maryland workforce

NOTE: Data sources no longer available to MHCC are in bold.

SOURCES OF INFORMATION

The Commission relies heavily on existing program and health care administration data to construct the health care expenditure accounts. This methodology enables MHCC to make use of the most consistent data available (generally audited) and minimizes redundant data collection and the associated expense. The information presented in the following chapters is derived from several state agencies, including the Maryland Insurance Administration, numerous administrations under the Department of Health and Mental Hygiene, and the Department of Corrections. Federal agencies – including the Health Care Financing Administration, the Office of Personnel Management and the Bureau of the Census – provided supporting information on Medicare HMO enrollment and expenditures, data on health insurance coverage in the U.S., and estimates of federal employee enrollment in health plans. Private sector organizations, including the American Association of Retired Persons and the American Medical Association, provided information on health care resources.

Detailed tables on state and regional health care expenditures are presented in the Appendix. The county-level tables on health care resources that appeared in last year's report appendices will be released in a county-level data book later this year.

REFINEMENTS & LIMITATIONS

This report presents information based on the health care expenditures and utilization of Maryland residents and not on expenditures and utilization associated with Maryland providers. In 1993, the Maryland General Assembly enacted health care reform legislation that focuses on the health care market faced by Maryland's residents and industry rather than a market defined by provider location. As previously mentioned, the state health care expenditures are based on data developed by other state and federal organizations. Most of these organizations produce audited data from detailed sources and the source data are generally protected and not available to MHCC. Although an assessment was not possible in all instances, an independent assessment of the quality of underlying data sources was conducted more often than not. The choice to rely mostly on existing data sources has also meant that **expenditures captured in the state accounts do not reflect the universe of expenditures included in the National Health Expenditure (NHE) accounts.** Expenses for research, facility construction, government public health activities and industry health services are not included in the state accounts. Also, the source of funds for state accounts differs from those

used in the NHE. State accounts: 1) separate NHE's "private insurance" source into "health plans" and "other," 2) omit from state and local government expenditures both hospital subsidies and workers compensation, and 3) exclude non-patient revenues and philanthropy. A description of the data sources used for the State Health Care Expenditure accounts appears in Appendix B, Technical Notes.

The expenditure categories for resident-specific information on private sector expenditures are limited and based on estimates rather than actual expenditures. Estimates for services to Maryland residents reimbursed by out-of-state payers are difficult to derive because these data are not captured in state sources. Uninsured services (such as nursing home care) rendered to state residents by out-of-state providers are also difficult to estimate for the same reason. Such services occur most often for residents of counties surrounding the District of Columbia (DC), parts of northern Maryland adjacent to Delaware, and areas of Western Maryland bordering West Virginia. Out-of-state employment and the substantial use of out-of-state providers by residents in "border counties" likely results in some underestimates of spending in these areas. Out-of-pocket spending for uninsured services must also be viewed cautiously because the Maryland-specific experience is not currently available. These estimates are derived from assumptions used to generate estimates of out-of-pocket spending for the National Health Expenditure accounts. Monitoring the number of uninsured and the significant dollars spent by individuals on uncovered services is a priority of the Commission. The use of regional estimates from the Medical Expenditure Panel Survey conducted by the Agency for Health Care Policy and Research to refine the approximation of out-of-pocket spending by Maryland residents is being expanded for future reporting.

Medicare and Medicaid HMO capitation payment allocations to specific provider / service categories were not possible due to the limitations of the information and financial systems supporting these government payers. With capitated payments by these payers on the increase, especially within the Maryland Medicaid Program, extreme percentage changes in some service categories appear. Both Medicare and Medicaid are undergoing improvements to their data sources that will result in more reliable information for future reporting.

These caveats notwithstanding, the Commission believes that the methodology developed for the state health expenditure accounts is both sustainable at a manageable cost for the long-term and accurate and comprehensive enough to provide answers to important questions on general health expenditure trends within the state.